

Title (en)  
ELECTRICALLY EXTENSIVELY HEATABLE, TRANSPARENT OBJECT, METHOD FOR THE PRODUCTION THEREOF, AND USE THEREOF

Title (de)  
ELEKTRISCH GROßFLÄCHIG BEHEIZBARER, TRANSPARENTER GEGENSTAND, VERFAHREN ZU SEINER HERSTELLUNG UND SEINE VERWENDUNG

Title (fr)  
OBJET TRANSPARENT DE GRANDE SURFACE POUVANT ÊTRE CHAUFFÉ ÉLECTRIQUEMENT, ET PROCÉDÉ DE FABRICATION ET UTILISATION DUDIT OBJET

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Application  
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Abstract (en)  
[origin: WO2010136400A1] The present invention relates to an electrically extensively heatable, transparent object (1) according to Figure 1, which comprises at least one transparent, electrically insulating substrate (2), at least one extensive, electrically conductive, transparent coating (3), which is connected to two electrical busbars (4.1 and 4.2) to transmit electrical power, at least one localized transparent area (5) that is free of the electrically conductive coating (3), and an electrically conductive band (6) that is applied to the coating, at least partially surrounds the periphery of the data transmission window (5), and has an electrical resistance in ohms per square that is lower than the electrical resistance in ohms per square of the coating (3), wherein the electrically conductive band (6) has at least one interruption (6.1). The present invention further relates to a method for the production thereof and use thereof.

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Citation (opposition)  
Opponent : PILKINGTON GROUP LIMITED  
• US 7223940 B2 20070529 - VOELTZEL CHARLES S [US], et al  
• US 6559419 B1 20030506 - SOL JEAN-MARC [FR], et al  
• US 2009044464 A1 20090219 - SCHMIDT LOTHAR [DE], et al  
• US 4385226 A 19830524 - SAUER GERD [DE]  
• US 2010006555 A1 20100114 - MAURER MARC [FR], et al

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